

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-23. (Cancelled)

24. (Currently Amended) A digital broadcasting system, comprising:

a transmitter that transmits a first transport stream in a first service area, the first transport stream including:

links between first programs in the first transport stream and second programs in one or more transport streams in one or more adjacent service areas, and priorities for the links; and

a receiver that automatically selects, when the receiver enters one of the adjacent service areas, [[a]] one of the second programs that corresponds to one of the first programs, wherein the selecting includes: program being transmitted in one of the adjacent service areas

using the links to locate the selected second program in the one or more transport streams when the links identify a match between one of the first programs and one of the second programs, and

searching the second programs in order of the priorities, when the links do not identify the match.

25. (Previously Presented) The system of claim 24, wherein the transmitter describes the links and the priorities using a link descriptor in at least one of a network information table, a service description table, and an event information table.

26. (Previously Presented) The system of claim 25, wherein the transmitter identifies the priority of each link in a linkage_type field or in a private_data_byte field in the link descriptor.

27. (Currently Amended) A digital broadcasting transmitter, comprising:
a multiplexer unit; and
a system controller, wherein the multiplexer unit and the system controller provide a first transport stream in a first service area, the first transport stream including:
links between first programs in the first transport stream and second programs in one or more transport streams in one or more adjacent service areas, and
priorities for the links, wherein:
the links allow location of one of the second programs that corresponds to one of the first programs, and
the priorities provide an order for searching the links to identify one of the second programs that corresponds to one of the first programs.

28. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in a network information table in the first transport stream.

29. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in a service description table in the first transport stream.

30. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in an event information table in the first transport stream.

31. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller rank the links based on the priorities.

32. (Previously Presented) The digital broadcasting transmitter of claim 27, wherein the multiplexer unit and the system controller include the links and the priorities in a link descriptor in at least one of a network information table, a service description table, and an event information table.

33. (Previously Presented) The digital broadcasting transmitter of claim 32, wherein the multiplexer unit and the system controller identify the priority of each link in a linkage_type field or in a private_data_byte field in the link descriptor.

34. (Currently Amended) A digital broadcasting receiver, comprising:

extracting means for extracting, from a first transport stream in a first service area:

links between first programs in the first transport stream and second programs in one or more transport streams in one or more adjacent service areas, and priorities for the links; and

selection means for automatically selecting [[a]] one of the second programs that corresponds to one of the first programs ~~program in one of the adjacent service areas based on the links and the priorities~~ when the receiver moves into the adjacent service area, wherein the selecting includes:

using the links to locate the selected second program in the one or more transport streams when the links identify a match between one of the first programs and one of the second programs, and
searching the second programs in order of the priorities, when the links do not identify the match.

35. (Previously Presented) The digital broadcasting receiver of claim 34, further comprising:

detection means for detecting a location of the receiver, wherein the selection means selects the program based on the location.

36. (Previously Presented) The digital broadcasting receiver of claim 35, wherein the detection means detects the location using a global positioning system.

37. (Previously Presented) The digital broadcasting receiver of claim 35,
wherein the detection means:

receives input of location information; and
determines the location using the location information.

38. (Previously Presented) The digital broadcasting receiver of claim 34,
comprising:

first receiver means for receiving the first transport stream; and
second receiver means for searching, using the selection means, for the
program.

39. (Previously Presented) The digital broadcasting receiver of claim 34,
wherein the selection means searches the links in order of the priorities.

40. (Currently Amended) A digital broadcasting receiver, comprising:
extracting means for extracting, from a first transport stream in a first service
area, links between first programs in the first transport stream and second programs in
one or more transport streams in one or more adjacent service areas; and
selection means for determining priorities for the links using the links and for
automatically selecting [[a]] one of the second programs that corresponds to one of the
first programs ~~program in one of the adjacent service areas based on the priorities~~ when
the receiver moves into the adjacent service area by searching the second programs in
order of the priorities.

41. (Previously Presented) The digital broadcasting receiver of claim 40, wherein the selection means determines the priorities using a history of moving the receiver among the adjacent service areas.

42. (Previously Presented) The digital broadcasting receiver of claim 40, wherein the selection means determines the priorities using a pre-defined ranking of the adjacent service areas.

43. (Previously Presented) The digital broadcasting receiver of claim 40, wherein the selection means determines the priorities using the number of links for each adjacent service area.

44. (Currently Amended) A method for digital broadcasting, comprising:
generating a first transport stream including a link descriptor, the link descriptor:
describing programs offered in second transport streams in adjacent
service areas, and
including priorities of the second transport streams, each priority indicating
an order for replacing the first transport stream with each second transport stream;
[[and]]
transmitting the first transport stream; and

selecting one of the programs when the receiver moves into the adjacent service
area by searching the programs in the second transport streams in order of the
priorities.